

BEAR RIVER BASIN

10015700 SULPHUR CREEK ABOVE RESERVOIR, BELOW LA CHAPELLE CREEK, NEAR EVANSTON, WY

LOCATION.--Lat 41°07'45", long 110°48'21", in NE^{1/4}SE^{1/4}SW^{1/4} sec. 2, T. 13 N., R. 119 W., Uinta County, Hydrologic Unit 16010101, on right bank 0.2 mi downstream from La Chapelle Creek, 3.3 mi upstream from Sulphur Creek Dam, and 12.8 mi southeast of Evanston.

DRAINAGE AREA.--64.2 mi².

PERIOD OF RECORD.--October 1957 to September 30, 1997. Monthly discharge only for October and November 1957, published in WSP 1734. October 1957 to October 1987 not equivalent because of inflow between sites. October 1987 to October 1989 at present site at different datum. (discontinued)

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,240 ft above sea level, from topographic map. Prior to October 7, 1987 at site 1.3 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,400 ft³/s June 1, 1983, gage height, 9.10 ft, from rating curve extended above 1,200 ft³/s on basis of slope-area measurement of peak flow. Flood was result of released water from temporary blockage of upstream road culverts; no flow at times some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 246 ft³/s April 16 and June 12, gage height, 7.19 ft; minimum daily discharge, 0.65 ft³/s Oct. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	9.9	9.2	e17	e14	e15	e28	63	22	4.2	13	3.2
2	.65	9.6	8.1	e16	e15	e17	e28	65	26	5.7	9.3	1.2
3	.66	9.8	11	e16	e13	e17	e29	47	25	6.5	7.2	1.2
4	.88	11	9.9	e17	e13	e16	e32	39	19	8.5	13	1.3
5	.90	13	9.4	e17	e15	e15	e36	57	17	11	49	1.3
6	.84	17	8.4	e17	e13	e16	e39	82	22	10	29	1.4
7	.83	12	9.4	e16	e12	e17	e36	93	23	13	16	1.8
8	.71	14	11	e14	e11	e19	e34	93	51	11	10	2.2
9	.85	19	12	e12	e11	e18	e34	89	135	11	7.3	2.4
10	1.0	20	12	e11	e19	e38	92	111	5.2	9.5	2.4	
11	1.0	19	14	e10	e13	e20	e42	96	67	4.2	26	2.4
12	1.1	18	12	e9.9	e13	e20	e44	91	95	14	24	2.2
13	1.0	20	13	e9.2	e15	e20	e45	92	152	20	15	1.4
14	1.1	21	14	e8.5	e14	e20	e47	95	65	9.0	9.8	1.4
15	1.2	23	19	e8.0	e15	e20	e51	94	59	7.1	7.7	1.5
16	1.7	12	e17	e7.5	e15	e21	132	84	50	6.9	5.9	4.2
17	2.1	8.8	e16	e7.5	e15	e23	133	79	41	3.8	5.2	5.0
18	2.3	21	e14	e7.5	e14	e22	103	66	29	4.0	4.9	5.2
19	3.4	50	e14	e8.0	e14	e21	91	48	24	12	4.6	13
20	3.6	26	e15	e9.2	e14	e21	96	36	17	17	5.0	16
21	5.0	15	e15	e9.2	e14	e21	87	29	14	10	5.0	15
22	4.4	27	e14	e8.0	e15	e22	60	30	11	8.5	5.0	28
23	9.4	26	e14	e7.5	e15	e22	56	26	7.7	19	4.7	26
24	7.4	19	e14	e8.5	e14	e24	77	35	6.9	78	5.0	14
25	7.5	15	e14	e11	e14	e23	61	45	6.6	29	4.8	13
26	6.5	14	e16	e10	e16	e26	37	34	5.8	16	4.5	15
27	8.0	8.4	e16	e12	e17	e30	48	25	4.5	16	4.1	15
28	6.6	8.9	e17	e11	e15	e29	89	18	5.6	17	3.9	10
29	8.0	8.8	e18	e12	---	e28	133	19	4.4	18	3.2	9.5
30	9.2	8.7	e17	e12	---	e28	79	25	4.3	17	2.6	8.4
31	9.7	---	e17	e13	---	e28	---	21	---	17	1.7	---
TOTAL	108.17	504.9	420.4	352.5	390	658	1845	1808	1120.8	429.6	315.9	224.6
MEAN	3.49	16.8	13.6	11.4	13.9	21.2	61.5	58.3	37.4	13.9	10.2	7.49
MAX	9.7	50	19	17	17	30	133	96	152	78	49	28
MIN	.65	8.4	8.1	7.5	11	15	28	18	4.3	3.8	1.7	1.2
AC-FT	215	1000	834	699	774	1310	3660	3590	2220	852	627	445

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

MEAN	2.16	5.18	5.09	5.08	7.46	24.0	40.5	49.1	23.8	7.19	2.59	1.28
MAX	6.77	16.8	13.6	11.4	22.2	52.7	69.5	154	55.3	20.7	10.2	7.49
(WY)	1992	1997	1997	1997	1995	1989	1996	1993	1995	1995	1997	1997
MIN	.18	.59	1.17	1.11	1.18	2.80	15.6	11.4	3.18	.18	.017	.000
(WY)	1991	1991	1991	1991	1991	1995	1995	1992	1994	1988	1988	1988

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1988 - 1997

ANNUAL TOTAL	6608.20	8177.87	14.5
ANNUAL MEAN	18.1	22.4	25.1
HIGHEST ANNUAL MEAN			7.09
LOWEST ANNUAL MEAN			1990
HIGHEST DAILY MEAN	250	Apr 10	394
LOWEST DAILY MEAN	.21	Sep 5	May 22 1993
ANNUAL SEVEN-DAY MINIMUM	.27	Sep 3	.00
ANNUAL RUNOFF (AC-FT)	13110	16220	Jul 15 1988
10 PERCENT EXCEEDS	45	56	.00
50 PERCENT EXCEEDS	9.4	14	Jul 15 1988
90 PERCENT EXCEEDS	.83	3.3	.22

e Estimated